



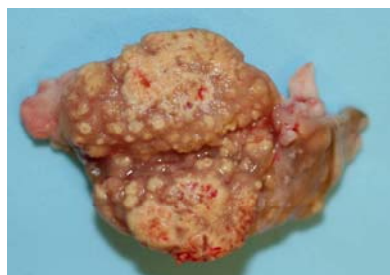
## Bovine Tuberculosis (TB) Update

Since January 2008, bovine TB has been confirmed in three California dairy herds in Fresno County. This outbreak was first identified in a single animal through routine testing that occurs in all slaughter facilities. The subsequent investigation revealed two more herds, each containing a single infected animal. The three herds are under quarantine and disease control plans have been implemented which include removal, euthanasia and necropsy of test-positive cattle.

TB Testing To Date		
	# Herd tests	# Cattle tests
Affected Herds	3	~20,000
Tested Herds	~145	~180,000

It is anticipated that in September 2008 the United States Department of Agriculture (USDA) will officially downgrade California's bovine TB status from "Accredited Free" to "Modified Accredited Advanced" (MAA) through notice in the Federal Register. The downgrade in status is required by USDA's Code of Federal Regulations following the detection of at least two tuberculosis-affected herds within 48-months.

Once a herd is classified as affected it remains under quarantine, if not depopulated, until it has completed



**Bovine lymph node showing gross lesions compatible with *Mycobacterium bovis***

at least eight negative whole herd tests over a minimum of four years. Two additional negative annual herd tests are required after the quarantine is released.

Federal regulations require that for a state to regain its "TB Free"

status, a waiting period of two years must occur, with no more positive TB tests, after depopulating the last affected herd. If not all affected herds are depopulated, a two-year waiting period must occur after the quarantine is released on the last affected herd. Depopulation of cattle from two of the affected herds has been completed.

## Source of Infection

The source of TB has not yet been identified. The isolates are typical of strains associated with dairy cases in the Southwest US and Mexican-origin cattle. They are distinct from the California isolates in 2002-2003, and from the isolates in Michigan and Minnesota. Direct movement of an infected animal from the first herd carried infection to the second herd. The isolate from the third herd is not related to the strain from the first and second affected herd.

## Impact on California

With California's downgrade from TB-Free to MAA, veterinarians or producers must check the TB testing requirements of receiving states when moving cattle out of California; state requirements may be more restrictive than federal rules. Current federal rules require intact cattle over six months of age that originate in an MAA state or zone, and are not known to be infected with or exposed to TB, to be officially identified and accompanied by a certificate stating that the animal tested negative to an official TB test conducted within 60 days prior to interstate movement. There are some exceptions, including:

- Cattle from an accredited herd, with a whole herd test within 12 months of the movement.
- Cattle moving directly from an approved market to a federally inspected slaughter facility.
- Breeding beef herds moving for grazing may be permitted to test within 12 months before or 30 days after movement, and the test to be good for three years, if they have a commuter herd agreement with the two states.

## California Bovine Tuberculosis Control Plans

The California Department of Food and Agriculture (CDFA), USDA, and the cattle industry are working together to control and eradicate bovine TB. Current plans to enhance the California TB program include:

- Continued testing of all herds identified as epidemiologically linked with the affected herds.
- Ensuring slaughter surveillance on all cattle and annual testing of all raw milk dairies.
- Continued use of official individual animal radio-frequency identification (RFID) in tested herds.
- Exploring regionalization plans to focus testing in the affected area.

## Testing and Identification in Associated Herds

All herds associated with the affected herds are being caudal fold tested by government veterinarians. Herd



Caudal fold tuberculin test responder

owners are being provided, free of charge, official individual animal RFID tags for test eligible cattle. Using RFID tags enhances accurate and efficient TB testing and traceability.

## Regionalization Plans

To reduce the burden of interstate testing requirements on industry, CDFA animal disease control experts are working with industry to evaluate a "Split State" designation. This would entail regionalizing part of California so that the remainder of the state could return to a "TB Free" status while intensive disease eradication efforts continue in the affected area. As part of the application, CDFA must develop a management zone and a plan to prevent disease spreading out of that zone. This will include requiring TB testing of cattle that move from the zone into the rest of California. It will take several months to develop this plan, which then must be approved by USDA officials.

## On Farm TB Prevention

The best ways for cattle producers to prevent bovine TB are to:

- Maintain a closed herd.
- Obtain TB-free herd accreditation.
- Isolate and test cattle entering the herd.
- Prevent contact between breeding cattle and Mexican feeder cattle, including in the sick pen.
- Prevent contact with cattle of unknown TB status.
- Arrange professional diagnostic workups of suspicious sick or dead animals.
- Establish a TB screening policy for employees.
- Enhance disease tracing by recording individual animal identification and maintaining accurate records.

## Significance of Bovine TB

While the risk of humans contracting bovine TB is extremely low due to the safeguards of milk pasteurization and routine meat inspection, people can contract TB through respiratory exposure to live infected cattle or their carcasses, and through consuming illegal soft cheese products. Conversely, humans infected with bovine TB can transmit disease to cattle.

## National TB Report

Between 2000 and 2008, 71 newly affected herds were detected in the U.S.; 28 were detected between 2005 and now. In April 2008, the U.S. Department of Agriculture made \$16.8 million in emergency funds available to continue bovine TB eradication efforts in California, Michigan and Minnesota.

**Arizona:** One affected herd detected in 2005 was depopulated.

**Colorado:** One affected herd was detected in 2007 after an infected rodeo bull was found during routine slaughter surveillance in Texas. This herd was depopulated.

**Michigan:** Since 1998, 44 cattle herds and two cervid herds have been detected. Since 1995, 593 infected whitetail deer have been detected from over 161,897 examined. Infection has also been found in elk, coyotes, raccoons, black bears, bobcats, red foxes, and opossums. Michigan has three TB zones: Free, MAA and Modified Accredited (MA).

**Minnesota:** Eleven affected beef herds have been detected: Three in 2005, two in 2006, two in 2007, and four in 2008. Minnesota's status was downgraded to MA when four affected herds were found in a 12-month period. All affected herds have been depopulated. Seventeen cases of bovine TB have been confirmed in whitetail deer. Minnesota is planning to request split-state status (MA and Free).

**New Mexico:** In September 2008, New Mexico lost its split-state status (Free and MAA), and was downgraded to MAA. An affected herd was detected in 2008, and a large affected dairy (two herds) was detected and depopulated in 2007. One affected dairy herd detected in 2003 remains under a test-and-removal plan, another was depopulated.

**Oklahoma:** One beef herd detected by slaughter surveillance was depopulated in 2007.

**Texas:** The last known infected herd was depopulated in September 2004 and Texas was declared TB free in September 2006.

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